**Parameter Table of Permeation Model**

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| Parameter | Description | Value |
|  | the concentration of Mcfp-3 | - |
|  | the concentration of fixed bacterial | - |
|  | the vector of prerequisite coefficient | - |
|  | the concentration of free bacterial | - |
|  | the permeation coefficient of on the i direction | the result of Monte Carlo Simulation |
|  | the rate of Mcfp-3 expression | 2.9430nmol/min |
|  | the rate of Mcfp-3 degradation | ~0nmol/min |
|  | the edge length of each lattice | the result of Monte Carlo Simulation |
|  | the time unit of prerequisite | the result of Monte Carlo Simulation |
|  | the possibility of effective collision | the result of Monte Carlo Simulation |
|  | average length of steps of Brownian motion | 0.0116/s |
|  | average free time of Brownian motion | 1s |
|  | the Avogadro constant | 6.02×1023 |
|  | the absolute temperature | - |
|  | the Rydberg constant | 1.097×107 |
|  | the radius and diameter of our yeast |  |
|  | the speed of the prerequisite | - |
|  | the density of our yeast | - |
|  | the dynamic viscosity coefficient |  |
|  | the total number of bacterial of the 26 neighboring lattices of the lattice (x,y,z) | - |